

2771-657

RECEIVED
CENTRAL FAX CENTER

AUG 08 2007

Section I (Amendments to the Claims)

Please amend claims 9, 12, 13, 19, 27, 31, 32, 37, 44, 49, 52, and 54, and add new claim 63, as set out in the following listing of the claims of the application.

1-8. (Cancelled).

9. (Currently amended) An apparatus comprising:

a hollow connector having an interior wall defining a fluid chamber for the passage of fluids, wherein the hollow connector comprises an inlet end and an outlet end, wherein the inlet end is configured to engage a container and the outlet end has an aperture therethrough for the egress of the fluids from the container; and

a membrane having an interior surface defining a housing chamber for housing the hollow connector with a gas that is essentially sterile,

wherein the gas, when inside the housing chamber, has a pressure sufficient to generate a laminar flow outward from an opening defined in the membrane upon piercing of the membrane by the connector

~~the apparatus includes at least one of the following features:~~

- ~~(i) the gas has a pressure of greater than about 1 atm when inside the housing chamber;~~
- ~~(ii) the interior surface of the membrane has a partial slit or cut that does not penetrate completely through the membrane.~~

10. (Previously presented) The apparatus of claim 9, wherein the gas comprises oxygen, nitrogen, argon, or a combination thereof.

11. (Previously presented) The apparatus of claim 9, wherein the gas is more than about 95% sterile.

12. (Currently amended) The apparatus of claim 9, wherein the gas has a pressure of greater than about 1.05 atm when inside the housing chamber.

2771-657

13. **(Currently amended)** The apparatus of claim 9, wherein the gas has a pressure of greater than ~~about~~ 1.1 atm when inside the housing chamber.
14. **(Previously presented)** The apparatus of claim 9, wherein the membrane has a thickness of less than about 200 microns.
15. **(Previously presented)** The apparatus of claim 9, wherein the membrane has a thickness of between about 15 microns to about 200 microns.
16. **(Previously presented)** The apparatus of claim 9, wherein the interior surface of the membrane has a partial slit or cut that does not penetrate completely through the membrane.
17. **(Previously presented)** The apparatus of claim 9, further comprising a container that is connected to the inlet end of the hollow connector.
18. **(Previously presented)** The apparatus of claim 17, further comprising a latch coupled between the container and the hollow connector.
19. **(Currently amended)** The apparatus of claim 9, wherein the hollow connector comprises a piercing element ~~needle or a cannula~~.
20. **(Previously presented)** The apparatus of claim 9, wherein the container comprises a flexible bag.
21. **(Previously presented)** The apparatus of claim 9, wherein the hollow connector is configured to engage the container via a threaded connection
22. **(Previously presented)** The apparatus of claim 9, wherein the outlet end of the hollow connector is further configured to engage a second container, wherein the second container is to receive, through the connector, the fluids from the container.
23. **(Previously presented)** The apparatus of claim 9, wherein the fluids comprise bodily fluids.

2771-657

24. (Previously presented) The apparatus of claim 23, wherein the bodily fluids comprise blood.

25. (Previously presented) The apparatus of claim 23, wherein the bodily fluids comprise at least one of macrophages, B lymphocytes, cytotoxic T lymphocytes, plasma cells, helper cells, B lymphocytes, antibodies, erythrocytes, leukocytes, red blood cells, white blood cells, and platelets.

26. (Previously presented) The apparatus of claim 23, wherein the bodily fluids comprise arterial blood, banked blood, cord blood, defibrinated blood, laky blood, oxalated blood, or whole blood.

27. (Currently amended) A system comprising:

a first delivery assembly comprising:

a first container having an opening, the first container to hold a liquid;

a hollow connector having an interior wall defining a fluid chamber for the passage of the liquid, wherein the hollow connector comprises an inlet end and an outlet end, wherein the inlet end is configured to engage the first container and the outlet end has an aperture therethrough for the egress of the liquid from the container; and

a membrane having an interior surface defining a housing chamber for housing the hollow connector with a gas that is essentially sterile, wherein the gas, when inside the housing chamber, has a pressure sufficient to generate a laminar flow outward from an opening defined in the membrane upon piercing of the membrane by the connector of greater than about 1 atm when inside the chamber;

~~wherein the first delivery assembly includes at least one of the following features:~~

~~(i) the gas has a pressure of greater than about 1 atm when inside the housing chamber;~~

~~(ii) the interior surface of the membrane has a partial slit or cut that does not penetrate completely through the membrane.~~

2771-657

28. **(Previously presented)** The system of claim 27 further comprising a second delivery assembly, wherein the second delivery assembly comprises:
- a different connector configured to engage the hollow connector; and
 - a second container to receive, through the second connector, the liquid from the first container through the aperture.
29. **(Previously presented)** The system of claim 27, wherein the gas comprises oxygen, nitrogen, argon, or a combination thereof.
30. **(Previously presented)** The system of claim 27, wherein the gas is more than about 95% sterile.
31. **(Currently amended)** The system of claim 27, wherein the gas has a pressure of greater than ~~about~~ 1.05 atm when inside the housing chamber.
32. **(Currently amended)** The system of claim 27, wherein the gas has a pressure of greater than ~~about~~ 1.1 atm when inside the housing chamber.
33. **(Previously presented)** The system of claim 27, wherein the membrane has a thickness of less than about 200 microns.
34. **(Previously presented)** The system of claim 27, wherein the membrane has a thickness of between about 15 microns to about 200 microns.
35. **(Previously presented)** The system of claim 27, wherein the interior surface of the membrane has a partial slit or cut that does not penetrate completely through the membrane.
36. **(Previously presented)** The system of claim 27, wherein the first delivery assembly comprises a latch coupled between the first container and the hollow connector.
37. **(Currently amended)** The system of claim 27, wherein the hollow connector comprises a piercing element ~~needle or a cannula~~.

2771-657

38. **(Previously presented)** The system of claim 27, wherein the first container comprises a flexible bag.

39. **(Previously presented)** The system of claim 27, wherein the hollow connector is configured to engage the first container via a threaded connection.

40. **(Previously presented)** The system of claim 27, wherein the liquid comprise bodily fluids.

41. **(Previously presented)** The system of claim 40, wherein the bodily fluids comprise blood.

42. **(Previously presented)** The system of claim 40, wherein the bodily fluids comprise at least one of macrophages, B lymphocytes, cytotoxic T lymphocytes, plasma cells, helper cells, B lymphocytes, antibodies, erythrocytes, leukocytes, red blood cells, white blood cells, and platelets.

43. **(Previously presented)** The system of claim 40, wherein the bodily fluids comprise arterial blood, banked blood, cord blood, defibrinated blood, laky blood, oxalated blood, or whole blood.

44. **(Currently amended)** A kit comprising:

a delivery assembly comprising a hollow connector having an interior wall defining a fluid chamber for the passage of fluids, wherein the hollow connector comprises an inlet end and an outlet end, wherein the inlet end is configured to engage a container and the outlet end has an aperture therethrough for the egress of the fluids from the container, the delivery assembly comprising a membrane having an interior surface defining a housing chamber for housing the hollow connector with a gas that is essentially sterile, wherein ~~the delivery assembly includes at least one of the following features: (i) the gas, has a pressure of greater than about 1 atm when inside the housing chamber, has a pressure sufficient to generate a laminar flow outward from an opening defined in the membrane upon piercing of the membrane by the connector; and (ii) the interior surface of the membrane has a partial slit or cut that does not penetrate completely through the membrane;~~

2771-657

packaging material; and

instructions or indicia located on the packaging material or inside the packaging material.

45. **(Previously presented)** The kit of claim 44, further comprising a fluid located in the container.

46. **(Previously presented)** The kit of claim 44, wherein the interior surface of the membrane has a partial slit or cut that does not penetrate completely through the membrane.

47. **(Previously presented)** The kit of claim 44, wherein the delivery assembly comprises a latch coupled between the container and the hollow connector.

48. **(Previously presented)** The kit of claim 44, wherein the hollow connector comprises a piercing element disposed within the housing chamber along the outlet end.

49. **(Currently amended)** The kit of claim 44, wherein the gas has a pressure of greater than ~~about~~ 1 atm when inside the housing chamber.

50. **(Previously presented)** The kit of claim 44, wherein the hollow connector is configured to engage the container via a threaded connection.

51. **(Previously presented)** The apparatus of claim 9, wherein the hollow connector comprises a piercing element disposed within the housing chamber along the outlet end.

52. **(Currently amended)** The apparatus of claim 9, wherein the gas has a pressure of greater than ~~about~~ 1 atm when inside the housing chamber.

53. **(Previously presented)** The system of claim 27, wherein the hollow connector comprises a piercing element disposed within the housing chamber along the outlet end.

54. **(Currently amended)** The system of claim 27, wherein the gas has a pressure of greater than ~~about~~ 1 atm when inside the housing chamber.

2771-657

- 55. (Previously presented)** A method comprising the steps of:
- connecting a source container adapted to hold a fluid to an inlet end of a hollow connector comprising a piercing element adjacent to an outlet end of the hollow connector, with the piercing element disposed in an essentially sterile gas at a pressure greater than about 1 atm, the gas being contained by a membrane;
 - positioning the outlet end of the hollow connector adjacent to a target container;
 - puncturing an opening in the membrane with the piercing element, wherein puncturing the opening generates a laminar flow of the gas along the sides of the opening; and
 - extending at least a portion of the hollow connector into the target container.
- 56. (Previously presented)** The method of claim 55, wherein the source fluid contains a fluid, and the method further comprising the step of transferring at least a portion of the fluid from the source container through the hollow connector into the target container.
- 57. (Previously presented)** The method of claim 55, further comprising the step of opening a latch between the hollow connector and the source container.
- 58. (Previously presented)** The method of claim 55, wherein the membrane initially comprises a partial slit or cut that does not penetrate completely through the membrane, and wherein the step of puncturing an opening in the membrane comprises puncturing the opening along the partial slit or cut.
- 59. (Previously presented)** A method comprising the steps of:
- enclosing a piercing element of a hollow connector within a membrane housing sealed from an external environment, the piercing element being adapted to puncture the membrane housing; and
 - inserting a gas that is essentially sterile into the membrane housing at a gas pressure of greater than about 1 atm to generate, when the piercing element punctures an opening in the membrane housing, a laminar flow of gas out of the membrane housing along sides of the opening.
- 60. (Previously presented)** The method of claim 59, the gas pressure comprises a gage pressure of greater than about 5 millibars.

2771-657

61. (Previously presented) The method of claim 59, further comprising creating a partial slit or cut in an inner lining of the membrane housing, with the partial slit or cut not penetrating an outer lining of the membrane housing.

62. (Previously presented) The method of claim 61, wherein creating the partial slit or cut in the inner lining of the membrane housing comprises creating the partial slit or cut at a location in the inner lining aligned with the piercing element to facilitate puncture by the piercing element of the membrane housing along the partial slit or cut.

63. (New) An apparatus comprising:

a hollow connector having an interior wall defining a fluid chamber for the passage of fluids, wherein the hollow connector comprises an inlet end and an outlet end, wherein the inlet end is configured to engage a container and the outlet end has an aperture therethrough for the egress of the fluids from the container; and

a membrane having an interior surface bounding a housing chamber for housing the hollow connector with a gas that is more than about 95% sterile,

wherein the apparatus includes at least one of the following features:

- (i) the gas has a pressure of greater than 1 atm when inside the housing chamber;
- (ii) the interior surface of the membrane has a partial slit or cut that does not penetrate completely through the membrane.